CLAIMS

What is claimed is:

1.   A method of producing audio and/or video (AV) data in an interactive mode using a markup document, the method comprising dividing an operation state of a presentation engine for reproducing the markup document into a start state, a reproduction state, a pause state, and a stop state.

2.   The method according to claim 1, wherein the reproducing state comprises:

a preloading process reading the markup document into a memory;

a loading process interpreting the markup document and loading the markup document on a screen; and

an interacting process facilitating an interaction between the markup document and a user.

3.   The method according to claim 2, wherein the reproduction state further comprises a terminating process terminating the markup document loaded on the screen.

4.   The method according to claim 2, wherein the reproduction state further comprises a discarding process discarding the markup document remaining in the memory.

5.   The method according to claim 1, wherein the presentation engine temporarily stops the reproduction in the pause state.

6.   The method according to claim 1, wherein in the pause state, the reproduction of markup resources stops, a timer in the presentation engine stops, and only events by a reproduction operation and a stop operation among user events are selectively received.

7.   The method according to claim 1, wherein in the stop state, the

reproduction of markup resources stops, a timer in the presentation engine stops, and information that is needed by the markup document and that is to be kept after the stop state is stored.

8.   A method of presenting a markup document in an interactive mode, the method comprising:

interpreting the markup document and generating a document object tree;

receiving a user input and generating a first user event based on the user input;

parsing a stylesheet and generating a style rule/selector list;

interpreting a script code that is included in the markup document;

applying the style rule/selector list to the document tree to create a document form;

generating a formatting structure that corresponds to the document form or changing a formatting structure according to a second user event;

rendering the markup document according to the document form; and

decoding a markup resource that is linked to the markup document.

9.   The method according to claim 8, wherein a root node of all nodes of the document tree is set as a document node, wherein all texts and elements generate nodes, and wherein a processing instruction, a comment, and a document type generate a node.

10.   The method according to claim 8, further comprising preloading the markup document into a memory.

11.   A method of reproducing audio and/or visual (AV) data in an interactive mode using a markup document, the method comprising:

interpreting the markup document and presenting the markup document comprising the AV data embedded therein on a screen; and

facilitating an interaction between the markup document and a user thereby allowing the user to pulse and/or stop the presentation of the markup document.

12.   A computer-readable medium comprising computer-executable instructions for performing the operations recited in claim 1.

13. A computer-readable medium comprising computer-executable instructions for performing the operations recited in claim 2.

14. A computer-readable medium comprising computer-executable instructions for performing the operations recited in claim 8.

15. A computer-readable medium comprising computer-executable instructions for performing the operations recited in claim 11.